

THE EFFECT OF SPECIAL HELP IN THE VISUAL PERCEPTION
SKILLS ON BEGINNING READING

A Field Report
Presented to
The School of Graduate Studies
Drake University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science in Education

by
Pauline Ann Barz

August 1970

1970
B289

THE EFFECT OF SPECIAL HELP IN THE VISUAL PERCEPTION
SKILLS ON BEGINNING READING

by

Pauline Ann Barz

Approved by Committee:

George S. Loe
Chairman

Howard Tupper

Earle L. Canfield
Dean of the School of Graduate Studies

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
The Problem	2
Statement of the problem	2
Significance of the problem	3
Procedures Used in the Study	4
Methodology of research	4
Plan of presentation and analysis	7
Assumptions and Limitations of the Study	7
Assumptions of the study	7
Limitations of the study	8
Definition of Terms	9
II. REVIEW OF THE LITERATURE	11
Professional Literature Pertaining to	
Visual Perception	11
Visual ability	12
The perceptually handicapped child	17
Relation of vision and reading	21
Relation of vision and reading scores	24
Views on cause of reading failure	25
Diagnosing individual learning difficulties	28
Role and Functions of the Elementary School	
Counselor	29

CHAPTER	PAGE
Literature relating to elementary school guidance and counseling	29
Guidance	32
The elementary school counselor	33
The elementary counselor does counseling with children	34
The Wrenn report and the American school counselor association report	37
Developmental task implication for counseling	39
III. PRESENTATIONS AND ANALYSIS OF DATA	41
Retentions - 1969 Control Group	59
IV. SUMMARY AND CONCLUSIONS	62
Implications for Elementary Counselors	63
BIBLIOGRAPHY	66

LIST OF TABLES

TABLE	PAGE
I. Distribution of Scores of Control Group 1969 in Word Knowledge on Metropolitan Achievement Test	44
II. Distribution of Scores of Experimental Group 1970 in Word Knowledge on Metropolitan Achievement Test	45
III. Comparison of Scores of Control Group and Experimental Group in Word Knowledge on Metropolitan Achievement Test	48
IV. Distribution of Scores of Control Group 1969 in Word Discrimination on Metropolitan Achievement Test	49
V. Distribution of Scores of Experimental Group 1970 in Word Discrimination on Metropolitan Achievement Test	51
VI. Comparison of Scores of Control Group and Experimental Group in Word Discrimination On Metropolitan Achievement Test	53
VII. Distribution of Scores of Control Group 1969 in Reading on Metropolitan Achievement Test	55
VIII. Distribution of Scores of Experimental Group 1970 in Reading on Metropolitan Achievement Test	57
IX. Comparison of Scores of Control Group and Experimental Group in Reading on Metropolitan Achievement Test	58
X. Comparison of Scores of Children Retained in 1969 Control Group with Their Scores in 1970	61

CHAPTER I

INTRODUCTION

Significant developments in the decade from 1950 to 1960 brought recognition that organized guidance programs on the elementary level are as important as on the secondary level. An increasing awareness that people are the most basic resource for a nation's continued progress and development focused attention upon the academically able student and, more especially, upon the underachieving youth.¹

The appointment of staff counselors in elementary schools reflects the impact of a few developments which are becoming familiar to almost everyone:

1. The universal acceptance of the educational implications of what we have learned about child development. . . .²
2. The education of the whole child has become a reality in terms of the common effort of all teachers in all schools. . . .³
3. The increasing complexity of choices--and thus of decision-making--and the growing awareness that basic attitudes and choices begin early in the child's life have made many teachers and administrators sensitive to the need for a critical evaluation of early-childhood education and of middle-childhood education

¹ Anna Meeks, "Elementary School Counseling," School Counselor, X (1962), 108-111; in John Adams, editor, Counseling and Guidance (New York: The Macmillan Company, 1955), p. 350.

² George E. Hill, Management and Improvement of Guidance (New York: Appleton-Century Crofts, 1965), pp. 43-45.

³ Ibid.

- as to their impact upon the child's growth in life-planning and choice making. . . .¹
4. Evidence has piled up from many sources that the forerunners of the high school drop-out problem, of the problem of underachievement, of the waste of talent of many children--and especially those from minority groups--lie in the child's experiences from babyhood to adolescence and cannot be adequately dealt with if we wait until the junior high school. . . .²
 5. We have become increasingly aware of the impact of home life, parental attitudes, and community influences in the determination of the child's sense of self, his sense of his worth--or lack of worth--his aspirations, his values, his achievements. . . .³

These five developments have formed the basis for introduction of organized and staffed guidance services in the elementary schools.

Since children everywhere have some common needs, guidance programs setup to meet their needs have many similar functions. But since elementary-school programs have evolved from local conditions, the services offered differ from school to school in organization and emphasis of specific areas within the total school program.⁴

I. THE PROBLEM

Statement of the problem. It was the purpose of this study to determine (1) the relationship between success in beginning reading and special training in areas of visual

¹ Ibid.

² Ibid.

³ Ibid.

⁴ Ibid.

perception deficiencies; and (2) the role of the elementary guidance counselor in the early identification of learning disabilities.¹

Significance of the problem. The educational goals which have been set for the schools have expanded to include "self-realization" and "effective human relations." Concerning this, Eckerson and Smith stated:

The sooner a child with a handicap--emotional, social, or physical--is identified, the sooner he can overcome it, learn to compensate for it, or learn to live with it. But he cannot learn alone. Without the help of some understanding adult, his handicap sets him apart and interferes with his school work. Guidance consultants in elementary schools can help parents and teachers understand and aid children when they show first signs of being handicapped.¹

Any attempt to solve problems must begin with a strengthened program of counseling and guidance services in the elementary school. In the early years of his school experiences, the child develops self-concepts and values that determine the motivation for learning and personal development in the secondary schools as well as in the adult years of an individual's life.² Early recognition of problem areas is necessary for early correction.

¹Louise Eckerson and Hyrum Smith, Guidance in the Elementary School (Washington: U. S. Department of Health, Education and Welfare, 1962), p. 1.

²Ibid.

The primary purpose of the guidance counselor is to assist the pupil to understand himself and to gain the maximum benefit from his school experiences. Therefore, the writer believed the study was significant in that its purpose was to determine the counselor's role in the early identification of specific learning disabilities.

II. PROCEDURES USED IN THE STUDY

Methodology of research. The writer administered the Metropolitan Achievement Readiness Test to all children in the Kindergarten classes in the 1968-1969 school year in a selected school in Iowa.

The pupils in this experimental group were screened using the Metropolitan Test in May, 1969:

1. To locate children with similar visual deficiencies so follow-up with developmental exercises will be possible. (group help)
2. To attempt to evaluate visual retention.
3. To locate children with visual perception learning problems so treatment can be given early. (individual help)

The pupils in this experimental group received individualized instruction as determined by diagnoses of their needs in the visual perception skills. The necessary skills were presented to each child or to small groups as they were

ready. Each proceeded at his own pace through materials structured in a sequential pattern which were designed to alleviate the visual perceptual deficiencies. The corrective procedures for the group included emphasis on greater discrimination and accuracy in recognizing and comparing word-like forms. The practice materials were drawn from such workbooks which stressed visual perception skills. Slides, films, filmstrips, and the overhead and opaque projectors were used along with the regular work to create and hold the interest of the child.

Forty of the group diagnosed as the pupils needing the most help in the visual perception area were taught in three classrooms where enrollments were fifteen, twelve, and twelve for one year. They were taught by teachers who attended "The Glen Haven Training Program" by N. C. Kephart, Ph.D. at Fort Collins, Colorado in the summer of 1969. This program was designed to provide in-service training of teachers in the areas of perceptual deficits. In-service training was given by the three teachers who attended the Glen Haven Program to all teachers in the experimental group.

The scores were collected from the participating kindergarten classes. These included tests in Word Meaning, Listening, Matching and Alphabet. The first step in the interpretation of raw scores was to convert them to standard scores by means of the "Standard Score Conversion Table"

which accompanies the Metropolitan Test. The method of interpreting these scores was in terms of percentiles which is a particularly appropriate method for comparison of a pupil score with the scores of other pupils of similar grade placement.

In May, 1969, the control group which includes all first graders in the same Iowa School were given the Metropolitan Achievement Test, Form A., Primary Battery 1 which includes Word Knowledge, Word Discrimination, and Reading. The writer used the same method of interpretation as described in the Kindergarten group with the expression of scores in terms of percentile rank.

In May, 1970, the experimental group which included all first graders in the same Iowa School were given the Metropolitan Achievement Test, Form A., Primary Battery 1 which included Word Knowledge, Word Discrimination, and Reading. The writer used the same method of interpretation as described for the Kindergarten group with the expression of scores in terms of percentile rank.

Information that was used in this study was gathered from (1) available research compiled in the area of visual perceptual deficits; (2) selected readings in elementary school guidance journals; (3) selected readings in research techniques and procedures; (4) selected readings from N. C. Kephart's books on the perceptually deficit child; and

(5) selected readings describing the role of the elementary guidance counselor in the diagnosis of perceptual problems.

Plan of presentation and analysis. Textual discussion and tables were used to describe and illustrate the need for special emphasis at the Elementary level by the Elementary Counselor in the perceptual area of visual perceptual deficits so the child can be helped at an early age.

Data were analyzed and evaluated to ascertain the degree of importance of each of the areas tested in the Metropolitan test.

Textual data were analyzed to determine the work assignment and role of the elementary counselor in the early diagnosis of learning disabilities.

III. ASSUMPTIONS AND LIMITATIONS OF THE STUDY

Assumptions of the study. In recent years there has been a growing awareness of the need for organized programs at the elementary level. Several basic assumptions are presented that tend to support the need for the study to determine the role of the elementary counselor in the learning disabilities area.

With guidance programs organized and established at the secondary level, there is a need to improve, clarify, and educate the people on the nature of guidance in the elementary school.

A second assumption is that considerable confusion exists regarding the various aspects of guidance in the elementary school such as the role and functions of the elementary counselor.

A third assumption is that there is a need to clarify the nature and possible help a counselor can give in the elementary school among such groups as elementary principals, elementary teachers, school psychologists, and school social service workers.

Limitations of the study. Certain limitations are recognized in this study.

All of the pupils tested in the control group on May, 1969 were tested in a total group situation. By administration request, the 12 pupils in one of the 1970 special first grade rooms were tested individually and in another room the pupils were tested in groups of 2's. A third group was tested in groups of seven and five. The others were tested in large groups of 25 or more.

Consideration should also be given to: (1) classroom situation--larger or smaller groups; (2) unique circumstances existing at the time final testing was done; and (3) the effect of previous learning experiences.

IV. DEFINITION OF TERMS

Certain terms used in this study require clarification. They are defined as follows:

Elementary school counselor. An elementary school counselor may be defined as a member of the school staff who has been assigned specifically to guidance work and who has had specialized preparation for this service.

Guidance. Guidance is that part of the total educational program designed to foster maximal development of individual potentialities through providing school wide assistance to youth in the choices, decisions, and adjustments each must make as he moves toward maturity.

The Elementary School. The term "elementary school" consists of grades Kindergarten through six.

Readiness. Readiness is that time when a child is physically, mentally, and emotionally ready to perform a given task.

Visual Readiness. Visual readiness is that state of all around development having those particular visual perception skills necessary for reading.

Visual Perception. Visual perception or discrimination, one of the new areas of investigation of assessing

reading readiness may be very simply defined as skill in distinguishing word-like shapes. Orientation to the left-to-right sequence of our symbols is another aspect of visual perception.

Near-point Binocular Acuity. Near-point binocular acuity is the clearness of vision at close distance.

Binocular Coordination. Binocular coordination is the degree of coordination or accurate parallel action of both eyes.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter on the review of literature contains the views held by various authorities on learning disabilities problems and suggestions for diagnosis and remediation.

PROFESSIONAL LITERATURE PERTAINING TO VISUAL PERCEPTION

Many recent studies confirm the importance of skill in perception for success in early reading. In view of the almost universal use of a visual method in teaching primary reading, it is not surprising that visual discrimination is being found a highly significant factor in determining reading success.

Dr. N. C. Kephart, Purdue Professor of Psychology, has said:

All will agree that vision is important to a child's successful progress in school, as at least 80% of what we learn comes to us through the visual process. Not only school achievement, but personality, posture and adjustment to life are closely integrated with visual development...More than half of the children who are slow in learning to read have visual problems. Many children do not have sufficient visual maturity to begin reading until they are seven or eight. A child with a high IQ may be doing average work when correction of a visual problem might make superior performance

possible. Next to neglected teeth, visual inefficiency is the most prevalent problem.¹

Dr. Casper Barnette has stated that everyone, but especially the young, should be trained and educated in visual conservation, adaptation, and visual efficiency. The growing eyes of children are being taxed more and more for more hours during the day than ever before. It is a neglected area and the time is long past due to do something about it.²

According to G. N. Getman and N. C. Kephart the third area of maturity is that of eye-hand coordination.

It is the area of coordinated activity that lays many of the foundations for perception. Eye-hand performance and achievement established the facility called transformation--the process where we as human beings can 'see with our hand' and 'feel with our eyes'. This transformation skill is the same skill which later allows the child to transform things into symbols which we call words--the symbol on the printed page is the trigger, but the transformation process learned in eye-hand action provides the percept and later the concept of the child.³

Visual Ability

The child whose visual acuity of binocular vision at near point is immature to the degree that he sees fuzzy,

¹Rudolph L. Kagerer, "The Relationship of Visual Perception in Early Grades to Reading Level in Grade Four," Winter Haven Report (1960).

²Casper C. Barnette, Learning Through Seeing (Dubuque, Iowa: Wm. C. Brown, 1961).

³Newell C. Kephart, The Slow Learner in the Classroom (Chicago: Charles E. Merrill, 1960).

blurred and indistinct letters becomes the victim of unfortunate frustration. For a while he may keep trying to read, not realizing that his classmates see the printed page clearly. But ocular discomfort, accompanied by blurring of the pages, soon leads him to believe that learning to read isn't really possible. The effect of this conviction may persevere long after the cause has disappeared. Very often the visually immature child develops a that's-too-hard-for-me attitude which stays with him and proves inimical to future progress in reading. By the time he is ready to read (a year or two later) he is reconciled to failure.

The visual abilities of five and six year old children vary greatly at the time of school entrance not only because of the physical differences in eyes as optical instruments, but also because of differing experiences the children have had in what they have seen and how they have reacted to their visual impressions. Some children have developed habits of careful observation and scrutiny of details. Others react only to the gross visual differences between objects. All children profit from games and exercises that will prepare them for specific visual skills needed in beginning reading...experiences that will develop finer control of eyes at reading distance; more accurate discrimination of visual details, such as size, color, shape, contour, position, place relationships, and internal details; and habits of using eyes in left-to-right progression.¹

The pre-reading program for developing visual skills anticipates the heavy load of eye work that will be required later in actual reading. As the child advances from grade

¹Marion Monroe, Growing Into Reading (Chicago: Scott, Foresman and Co., 1951).

to grade he will spend an increasing number of hours each day reading. To meet the demands placed upon him at each new level of reading, he must grow in ability to discriminate tiny details of more and more printed words, to increase speed, and to widen the span of visual perception.

It is often the case that critical tasks of near vision are imposed upon children at an early age. The rapid increase of nearsightedness among children as they advance in school suggests the possibility that educational achievement may be purchased, partially at least, at the expense of eyesight or ocular welfare. At any rate, such considerations indicate that near vision tasks should be minimized during childhood and that all aids to seeing should be provided for children when and where they are required to perform such tasks for extended periods. Large print and adequate light along with proper encouragement, may reduce the tendency for young children to hold the book too close to the eyes. But the fact still remains that a child's arms are short. Therefore, it appears worthwhile to utilize distant vision more, as in some phases of so-called visual education. Systematic eye exercises might be used for the very young. Restful use of eyes at greater distances, outdoor activities, and variations of less restricting tasks should be encouraged.

Many educators and psychologists agree to the unusual value of picture films, large pictures, charts, models or

other educational toys or materials which can be used at greater distances from young eyes.

Even if the eyes are normal, the child may have immature visual perception. Seeing a thing does not always mean noticing its details. Many young children pay attention only to the main characteristics of visual stimuli--the size, shape, and color...and ignore the details. When asked to match letters or words they make many errors, not because of faulty vision but because they do not notice differences which are obvious to older children.¹

In a visual study of 225 Chicago school children (grades 1-8) Park and Burri reported the following:

It was found that a great many of the first graders had vision below 20/20 even though they had little refractive error, and that many had poor fusion and little stereopsis. The problem is apparently one of maturational retardation or low achievement in the development of good binocular vision and not attributed to visual defects. In order to discover whether this poor binocular function in the pre-reading and beginning reading groups was consistently greater than among the older children, an analysis of the frequency of the various eye factors was made and compared with those in the older group. It was found that there were consistently more students with poor vision, with little or no fusion or stereopsis, and poor diction among the younger children than in the other age groups.²

The child's physical development has an important part to play in success in reading, particularly in regard to his vision and learning. The danger of too much confining play is:

¹ A. J. Harris, How to Increase Reading Ability (New York: Longmans, Green, 1956).

² G. E. Park and C. Burri, "Eye Maturation and Reading Difficulties," Journal of Educational Psychology, XXXIV (1953), 538-539.

Some children who get to their feet too early, and walk without previously creeping, miss some of the importance of horizontalness, and actually seem to get too much of the verticalness into the experiential backgrounds so necessary for school achievement. These children can later write numbers, or words, on paper in vertical rows more easily than on horizontal lines across the page. It has been clinically noted that these children's eye movements are more efficient and smooth in the vertical, and clumsy and jerky in the horizontal direction. The child must learn to read in the horizontal direction, however, since all books in our culture are so printed.¹

Dr. Getman and Dr. Kephart write,

Those of us dealing clinically with children are convinced by our study and research that it is this lack of fundamental development in eye-hand coordination that accounts for poor readers in our educational system. There is no substitute for this skill; phonics, sight reading, word study, association, etc., will all be inadequate if the proper level of skill² in eye-hand coordination is lacking in any child.

To detect possible visual defects, school nurses and reading clinicians use a variety of screening devices. If the screening indicates a visual deficiency is present, the child is referred to a competent specialist for expert diagnosis. None of these screening devices is meant to take the place of a regular eye examination by a specialist. Several screening devices commonly used are the Keystone Visual Survey Telebinocular, the Eames Eye Test, the Massachusetts Vision Test, the Ortho-Rater, and the Snellen Chart.

The screening tests do not provide any final diagnosis of the exact visual difficulty of a person. We may know that his poor visual acuity

¹G. N. Getman and N. C. Kephart, The Perceptual Development of Retarded Children, Luverne, Minnesota. Manual: Purdue University, Lafayette, Indiana, 1956.

²Newell C. Kephart, The Slow Learner in the Classroom (Chicago: Charles E. Merrill Co., 1960).

may be due to nearsightedness, farsightedness, astigmatism, binocular incoordination, or something more serious. But the exact defect must be determined by an eye specialist on referral. And it is unimportant if some referrals happen not to disclose difficulties that need correction.¹

The Perceptually Handicapped Child

Learning Pathways Inc. announces the Glen Haven In-Service Training program which was developed by and conducted under the supervision of N. C. Kephart, Ph.D. The following article describes the program located in Fort Collins, Colorado, by Dr. Kephart, to bridge the gap between sound research and its application to requests for in-service training of teachers.

Few areas in education have caused such controversy in recent years as the perceptually handicapped child. These children are not necessarily a new breed that have suddenly emerged into our society. As early as 1898, Hinshelwood recognized dyslexia. For a number of years neurologists have been diagnosing language disability; mainly in private patients. What IS new, however, is the refinement of diagnostic procedures which have exposed a larger group of handicapped children who have learning disabilities of a neurogenic origin. They are children who have, in the past, been variously called slow, disturbed, under achiever, lazy, or dumb. In fact, they have been called nearly everything derogatory that can be applied to a student.

If we assume that the objective of education is to assist the child with learning so that he may realize his potential and become an effective part of society, it is evident that our present classroom procedures have failed for the perceptually

¹Guy L. Bond and Miles A. Tinker, Reading Difficulties: Their Diagnosis and Correction (New York: Appleton-Century-Crofts, 1967), pp. 107-109.

handicapped child. In many cases, they have served to magnify the frustrations that he must suffer. Generally, these children have been placed in the "slow" group, retained for a year, or allowed to drop out at the earliest opportunity. They often become behavioral problems due to their repeated failure. Unlike retarded children, these children are very much aware of their failures.

Only after individualizing the problem through an adequate diagnosis may a teacher be ready to develop a remedial program. The normal potential for learning is there. However, the path to reach it may be devious. Since these children are unable to integrate processes in the normal way, they need a firmly structured program incorporating extra drill. It would obviously be absurd and virtually impossible to provide tutors for the fifteen to twenty percent of the Slow Learners in the classrooms. What is needed is an early diagnosis and sound classroom program in the primary grades to overcome the defects of many.¹

Mrs. Olive Garfield, psychologist at Dodge Elementary in Wichita, Kansas, describes the perceptually handicapped child in this way:

Mrs. Garfield does not stop with hand and arm exercises. When a child's eyes do not "track" properly, she again turns to Kephart for ocular control exercises--using a pencil, a ball or other object for practice in focusing and following the object with both eyes going in the same direction. When a child cannot discriminate among circles, squares, rectangles, diamonds and other geometrical forms, she turns to Winter Haven and its work in form constancy perception, using large templates at the chalkboard and utilizing the smaller ones for desk work.

Children like Willie, who fail to discriminate a figure from its background, are given tasks such as copying pegboard patterns and sorting objects

¹N. C. Kephart, Ph.D., "The Glen Haven Training Program," Fort Collins, Colorado, 1969.

for size, shape and color. They also do pencil and paper exercises with partially-made figures which are to be completed and hidden figures to find and outline against mottled or otherwise confusing background.

Mrs. Garfield matches and mixes ideas from any and all sources--the pencil and paper work from the Marianne Frostig Developmental Remedial Series, the McLeod workbook material, "Perceptual Bingo" and other games from the Erie and Fairbanks-Robinson systems. In all cases the remediation mix was based on the needs of the individual child.

What are perceptual problems? Mrs. Garfield starts from the beginning. Perception, she says, is the process by which we make sense out of our environment. It is as basic and automatic as eating, breathing, sleeping, and moving. It functions without conscious direction, continuously taking in, selecting and organizing the countless impressions which moment by moment, arrive through the senses. It is speech, body movement, seeing, hearing and other kinds of behavior.

Every child, from birth, is surrounded by an environment of physical energy to which his sense organs respond. His brain differentiates, makes sense out of all these impressions so that it can direct his actions. When he enters school he must differentiate many little marks on charts, papers and the chalkboard. He must learn to detect the tiniest differences between letters, words, and meanings.

Most children learn to do this with a minimum of difficulty. But the child with a perceptual handicap does not. He fails to perceive important differences. He overlooks important details or focuses on them so strongly that he misses the whole. He hears meanings but fails to attend to word structure. He does not hear words correctly and so is misled in their meanings.

To add to everyone's confusion, including the child's, he may do some things well and some very poorly. He seems to be inconsistent, yet he shows in many ways that he is not retarded. He is overstimulated--not understimulated as the retarded child appears to be--by the wealth of interesting

material on hand and by the lively activity of his classmates. It is difficult for him to make sense out of anything.

Because most of these characteristics are observable at the kindergarten level, Mrs. Garfield believes that Kindergarten is the place to start helping children with perceptual disabilities. A developmental program can be started at any time prior to the eighth birthday, she believes, but with perceptual problems it's a simple case of the sooner the better.

The initial remedial step when visual difficulties have been detected is usually to refer the pupil to a local eye specialist who, presumably, will make any corrections that are necessary. In our opinion, this is not an adequate follow-up on this diagnostic step. As in most therapeutic areas, there are conflicting philosophies of the proper treatment of visual handicaps. Despite a wealth of evidence of the values of visual training, or orthoptics or eye exercises as they are sometimes called, some medical vision specialists are either ignorant of this whole field or definitely antagonistic to its use. Yet studies by Apperson, Eberl, Peters and many others show that this approach can contribute markedly to reading improvement in certain visual conditions.

A second problem is encountered if the reading clinician assumes omniscience on the part of the eye specialist. Many of the examiners to whom the retarded reader is referred seem unaware of the intensive demands in near-point work imposed by the school. Some are inexperienced in the examination of children and may even apply adult standards of visual performance that are inappropriate to the visual developmental status of the child. Some are satisfied with corrections for distress or to aid the pupil in his near-point task of reading. Some ignore minor degrees of imbalance, fusional difficulties, or accommodation-convergence defects despite the almost unanimous indications of research that these particular difficulties are frequently significant in reading problems. These defects, which sometimes may be corrected by visual training,

¹Edna L. Harrison, "The Perceptually Handicapped Child," The Grade Teacher, LXXXVI (April, 1969), 74-75.

are often de-emphasized by those specialists who don't happen to belong to the professional group that utilizes this approach, or by those who are concerned only about structural or disease conditions of the eye.

Because of these differences in the opinions and practices of various groups of vision specialists, the reading clinician must continue to evaluate the visual functioning of the poor reader even after he has been referred for professional examination. If the distress symptoms are not relieved and the visual difficulties continue to affect reading performances unfavorably, the diagnostician must seek further or more effective help for the pupil. Consultation with several vision specialists who represent both optometric and ophthalmological viewpoints may be most desirable to find a satisfactory functional course of treatment.

Relation of Vision and Reading

William S. Gray says,

Reading is more than just an extension of a spoken word. Reading is an elaborate organization of visual signs that must be organized in proper sequence and with proper experience to be aroused when the appropriate 'coded input' is instigated. Reading is coded 'input'. Vision is 'output'. The relationship between reading and vision is intimate and tenuous.²

Despite the fact that it has not yet been established what proportion of reading problem cases are due primarily to visual difficulties, the evaluation of vision and visual skills is of paramount importance in reading disability. Reading is in the final analysis, a visual task and the poor reader must be helped to achieve the greatest degree of effective vision possible.³

¹George D. Spache, Toward Better Reading (Champaign, Illinois: Garrard Press, 1963), pp. 301-302.

²William S. Gray, Reading in Action, Vol. 2 (New York: Scholastic Magazine, 1959).

³Spache, loc. cit.

James C. Coleman conducted a study which dealt with the hypothesized relationship between perceptual retardation and reading disability in subjects with average or above average intelligence. It was found that in this group of reading disability cases:

1. A majority of these subjects were marked as being retarded in perceptual development.
2. Perceptual development lagged significantly behind the development of general intelligence in a majority of subjects.
3. A minority of subjects were average or above average in perceptual development.
4. Retardation in perceptual differentiation was cumulative with age.
5. Perceptual retardation was a significant factor in reading disability.

The possible value of training in perceptual differentiation as symptomatic treatment for reading disability was suggested.¹

Probably the most thorough vision study available is that directed by Charles R. Kelley, formerly of North Carolina State College. This was a four-year longitudinal survey of the development of vision at first, fifth, and ninth grade levels. Nineteen measures of vision and thirteen tests of school achievement, intelligence and personality comprised the measuring instruments. Because of the repeated careful testing, the detailed planning and the objective interpretation of the results, Kelley's report is most significant.

The North Carolina Study indicates that as children progress through the grades far-point acuity declines sharply, near-point acuity rises and myopia increases markedly, particularly between the fifth to eighth grades. Myopia was definitely related to good grades and good reading skills.

Students with four-year changes in the direction of esophoria or overconvergence showed a markedly

¹James C. Coleman, "Perceptual Retardation in Reading Disability Cases," Journal of Educational Psychology, XLIV (1953).

decreasing grade average. Those with the opposite tendency to exphoria at nearpoint tended to show poor fusion, low depth perception and poor visual acuity but these developments were not accompanied by poor reading scores. Far-sightedness alone was not significant but when combined with either of the phorias at far-point or with esophoria at near tended to result in pronounced reading deficiency. Here again we see the significance of the interrelatedness of visual functions, ignored in so many other reports.

In the skills of binocular co-ordination and fusion, Dr. Kelley's study found a marked increase in the loss of these functions in high school ages. Fusional difficulties were not reflected in poor reading scores in a common, brief reading test. But in a longer test demanding sustained reading, these pupils showed slower rate and poorer comprehension. As has been found in most vision studies, pupils with no fusion, those reading exclusively with one eye, read with normal speed and comprehension. They had solved the handicap of slow, inaccurate fusion by suspending vision in one eye and the complete renunciation of binocular coordination and vision, a solution which might lead to more serious visual problems in adult life.

Good depth perception supported good fusion, good visual acuity, and normal phorias, although it was not associated with above-average reading performances. But very poor depth scorers made below-average scores on nearly all non-visual tests, particularly those of social adjustment. Poor depth scores were common among those pupils with under-convergence at near-point or those with far-sightedness. In a sense, depth perception performances were symptomatic of the continuing adequacy of other visual functions and of academic and social adjustment.

The North Carolina Study epitomizes in its findings most of the implications we would derive from a careful survey of the vision literature. It also demonstrates the values of repeated testing, and of interpretations based on a recognition of the interrelation of visual functions. The Study did not measure all visual functions since it employed a simple screening battery, the Keystone Visual Survey. But its results are more meaningful to the reading worker because it did not depend upon complex tests which could be administered only by professionals. Also, by the choice of a group of acceptable tests available to any reading

diagnostician, the Study avoided becoming involved in the interminable debates between groups of vision specialists regarding the merits of various professional tests.

Relation of Vision and Reading Success

In regard to visual perception and academic success, Bond and Tinker say:

One should recognize that the eye defects may be a handicap to both good and poor readers. Optimum conditions for learning to read do require comfortable and efficient vision. The presence of eye defects which can be corrected should not be condoned. It is the responsibility of the school and home to do whatever is possible to assure effective vision.²

We are gradually beginning to recognize that academic achievement is impossible without basic visual ability...What happens then to the individual who has not developed basic skills and subsequently basic reading skills? To put it in a slightly different way, such an unfortunate individual lacks that sense of 'belongingness' which is so basically and instinctively a need of the human person.³

For a man to be able to function according to his social nature, he must be able to communicate, and by communication we are, of course, implying a reciprocal process. The ability to read, in our culture, is essential to a man's ability to communicate and be communicated with. Without reading, therefore, man loses that sense of belongingness. He does not have that basic sense of security that all of us have, and may not be consciously aware of, that derives from knowing that we are not alone; that we can get to others; and others can share with us; that we are one, through communication, with our fellowman. We view reading and visual ability, therefore, as important components of this totality. Therefore, when

¹ Spache, loc. cit.

² Bond and Tinker, loc. cit.

³ Albert F. J. S. Grau, "The Emotional World of the Non-Achiever," The Journal of the Optometric Association, XXVIII, No. 9 (April, 1957), 523.

we improve this vision and reading ability, we are improving the total process.¹

Views on Cause of Reading Failure

Dr. Marguerite Eberl, a Milwaukee optometrist and authority on remedial reading, believes many children develop inadequate and faulty vision habits which do not allow them to take advantage of reading instruction. Often children with perfect eyes, structurally speaking, have great difficulty in focusing. These are functional faults and should be treated as such.²

Even though reading is one of the most complex, abstract and supreme accomplishments of a human being, we must remember that a human being has numerous avenues through which he can learn any skill. Further, because a child possesses these various avenues of learning (via all of the senses), whenever the child can apply all of them, each furnishes more bits of information to the process of symbolization, and the visualization is more correct, more adequate, and more durable.

Visualization. Some children can read fluently but fail to comprehend well. They should be helped to form mental pictures as they read. Unfortunately far too little attention has been given to training pupils on all grade levels to visualize details. Children must be trained to build mental pictures as they read, to be aware of the richness, the imagery or sensory impressions.³

¹ Ibid.

² Dr. Margaret Eberl, "Why Johnny Can't Read," The Optometric Extension Program News, Vol. 20, No. 10, (June, 1956).

³ G. N. Getman, "How To Develop Your Child's Intelligence," Luverne, Minnesota, 1957.

As the world of symbolic direction grows, so must vision grow and so does imagination. While we do not wish to curb the sense development sufficiently in each child, nevertheless, we do not wish to limit the development of abstract intelligence according to the potentiality of each child.¹

Visual projection is the use of visual memory and visual comparison for imaginative thinking. Day-dreaming and imagination are very positive childhood activities and need to be utilized and encouraged by parents. Needless to say excessive day-dreaming and fabrication should not be overdone, but the child's own use of visualization is of significant importance. His skill in projecting his visual memories and visual comparison into speech (and later into drawing and writing) is important to his creativeness. This is the ultimate use of visualization and provides a medium whereby the child becomes a participant rather than an observer.²

The mature reader usually secures meaning from the page or from several pages without vocalizing a single word. The good reader reads ideas. The more vocalization the more there is mere verbalization. The deeper learning becomes the more visualization takes place.³

Vocalization is known to be a deterrent to rapid comprehending of reading material. If a reader can actually 'hear himself read', then the guidance dominance has not shifted to the visual. The Lyoneses state, 'If the learning has been adequate and purposeful, the verbal will become increasingly subordinate, and visually retained symbols increasingly dominant. The visually held symbols work as readily accessible tools for the conveyance of thought which the mind can arrange and combine rapidly without slow detouring through verbal.'⁴

¹ Ibid.

² Ibid.

³ Dorothy J. McGinnis, "Effective Reading," New York: The Dryden Press, Inc., 1957.

⁴ Venard C. Lyons: Emily B. Lyons, "Collected Works of Lyons and Lyons," American Optometric Association, St. Louis, Missouri.

Dr. Kephart puts reading in school as a "compulsory, near centered visual task which creates tension." The child reacts to this stress in one of three ways, Dr. Kephart says:

1. He increases his restless movements, probably as an attempt to drain off tension by gross muscle activity.
2. He makes a characteristic response of the visual mechanism behaving as though he were nearsighted.
3. Or else, he quits.

Dr. Kephart warns that unless the child receives help in meeting this stress he may develop into a child with generalized nervous tension (the so-called problem child); he may develop visual difficulties with actual changes in eye structure which cause lasting ocular defects; or he may become a non-participant in school, failing to learn to read, write or spell. Does this mean we shouldn't teach this child to read? Hardly. But it does mean that in a society where the ability to read is so important, some way must be found to help those children who react strongly to the stress of learning to read.¹

Stress does bring about psychological havoc in many cases. Elementary counselors and teachers should strive to alleviate it whenever we can. Sometimes the direct involvement of parents is the answer. We should try to develop in the home and in the school climates which foster worthy interests and that engender successful endeavor. In this way we can do much toward the emergence of a better and happier world.

¹D. H. Radler, "How Johnny Can Read," P. R. F. Horizon (pamphlet), Vol. 3, No. 1, Purdue Research Foundation, September, 1956.

Diagnosing Individual Learning Difficulties

Generally, too little attention is given to the diagnoses of learning difficulties. Yet, if specific weaknesses are to be corrected, concerted action by the teacher, the counselor, and the pupil is necessary. The primary purpose of the guidance counselor is to assist the pupil to understand himself and to gain the maximum benefit from his school experiences. Therefore the counselor and the teacher must give proper attention to the specific learning difficulties of pupils.

Diagnosing learning difficulties of pupils requires thought on the part of the teacher, the counselor, and the pupil. It involves the formation of judgements and hypothesis. Scores on standardized tests are helpful and such information should be supplemented with other additional information.

In describing the use of tests in diagnosing learning problems, various forms of diagnostic tests given at appropriate intervals may reveal diagnostic data. The first form can be given at the beginning of the instructional period so that the results can be used for identifying strengths and weaknesses. Then when teachers and counselors have located specific weaknesses, the task still remains of collecting materials and planning methods to meet specific pupil needs. The second form of the test can be used at the conclusion

of the period to determine the amount of progress.¹

ROLE AND FUNCTIONS OF THE ELEMENTARY
SCHOOL COUNSELOR

Literature Relating to Elementary
School Guidance and Counseling

Guidance programs in secondary schools have been growing steadily in the past forty years. The emphasis has been on vocational and educational guidance. The need for this type of guidance was observed during the postwar years when veterans returned to civilian life. Useful tools in the form of specialized tests of aptitude and interest developed rapidly. However, during this same period of time, there were very few developments in guidance at the elementary school level.²

Significant developments in the decade from 1950 to 1960 brought recognition that organized guidance programs on the elementary level are as important as on the secondary level. An increasing awareness that people are the most basic resource for a nation's continued progress and development focused attention upon the academically able

¹ Arthur E. Traxler, Techniques of Guidance (New York: Harper, 1957), pp. 174-176.

² Ralph Garry, Guidance Techniques for Elementary Teachers (Columbus, Ohio: Charles E. Merrill Books, Inc., 1966), p. 5.

student and, more especially, upon the underachieving able youth.¹ Garry stated that:

It has become clear that not only are skills in the 3 R's needed, but also man must be able to live with himself, and with other men. Understanding and accepting oneself, being able to join with others in common activity, knowing and accepting the rules and procedures of society, having realistic goals which are within one's capability and harmonious with the social order are as important as technical skills. In our industrialized, urban society with its shifting structure, the school has become increasingly responsible for providing for these aspects of child development.²

The schools are expected to be the man builders of the "great society." They no longer are permitted to exist in poverty, passing on the cultural heritage they choose. Due to innovations in curricula and organizational patterns, foundation and federal money, school personnel are now required to demonstrate their worth. The school will be expected to achieve the guidance goal of maximum individual development. The school is the only social agency which deals with all children, and society expects that it will prepare all children to be adequate for whatever the changed adult world will require.³

¹Anna Meeks, "Elementary School Counseling," School Counselor, X (1962), 108-111; in John Adams, editor, Counseling and Guidance (New York: The Macmillan Company, 1955), p. 350.

²Garry, loc. cit., p 6.

³Margaret Ruth Smith, Guidance-Personnel Work: Future Tense (New York: Teachers College Press, Columbia University, 1966), pp. 36-37.

The educational goals which have been set for the schools have expanded to include "self-realization" and "effective human relations." Concerning this, Eckerson and Smith stated:

The sooner a child with a handicap--emotional, social, or physical--is identified, the sooner he can overcome it, learn to compensate for it, or learn to live with it. But he cannot learn alone. Without the help of some understanding adult, his handicap sets him apart and interferes with his school work. Guidance consultants in elementary schools can help parents and teachers understand and aid children when they show the first signs of being handicapped.¹

Any attempt to solve problems must begin with a strengthened program of counseling and guidance services in the elementary school. In the early years of his school experiences, the child develops self-concepts and values that determine the motivation for learning and personal development in the secondary schools as well as in the adult years of an individual's life.² Early recognition of problem areas is necessary for early correction.

Wrenn wrote:

At its best a school guidance service increases the efficiency of everything else that happens in the school because it facilitates both understanding by pupils and parents of what the school has to offer. Such a service helps everyone to make wiser decisions about using what is available. The dollars spent on

¹Louise Eckerson and Hyrum Smith, Guidance in the Elementary School (Washington: U. S. Department of Health, Education and Welfare, 1962), p. 1.

²Meeks, loc. cit.

such services can assure much greater returns on the vastly bigger sums spent to support the total instructional program. The lack of an effective guidance program often means that the costs of providing an expensive educational opportunity for pupils may be almost completely wasted.

Guidance. Strang has stated that:

Guidance is education focused on personal development. It is a process of helping every child discover and develop his potentialities. Its end result is personal happiness and social usefulness.²

Guidance is concerned with providing an environment in which every child can grow into a socially desirable, happy, wholesome personality. Such an environment has to be controlled to guarantee a maximum of shared responsibilities and privileges where pupils can help plan, execute, and evaluate their own experiences. Guidance recognizes the importance of the "whole child" and attention is given to the physical, mental, emotional, and social needs of the child.³ Guidance is not corrective, not remedial, but developmental, preventive, and continuous. It is an integral part of the total educational program, and to be most

¹C. Gilbert Wrenn, The Counselor in a Changing World (Washington: American Personnel and Guidance Association, 1963), p. 140.

²Ruth Strang, "Guidance in the Elementary School," Guidance for Today's Children (Washington: Department of Elementary School Principals, National Education Association, 1954), 2.

³Roy DeVerl Willey, Guidance in Elementary Education (New York: Harper and Brothers, 1960), pp. 30-31.

effective, the guidance process in the elementary school must be a part of a continuous guidance process from the child's first contact with school and follow him at least until he completes his education.¹

Guidance in the elementary school assists all pupils directly, and indirectly through their teachers and weaknesses; the encouragement of talents; the prevention of conditions which interfere with learning; and the early use of available resources to meet the needs of the children.²

The elementary school counselor. Johnson defined the elementary school counselor as a "member of the school staff who has been assigned specifically to guidance work and who has had specialized preparation for the service."³ The counselor works primarily in the area of understanding: understanding of the child by the school and his home; and understanding of the school by the child. The roles that he can normally assume are those of counseling, coordinating, and consulting.

¹ Meeks, op. cit., p. 351.

² Louise Onwake Eckerson and Hyrum Smith, "Elementary School Guidance: The Consultant," School Life, XLIV (July, 1962); in Don C. Dinkmeyer, Guidance and Counseling in the Elementary School (New York: Holt, Rinehart and Winston, Inc., 1968), pp. 112-113.

³ Walter F. Johnson, Buford Stefflre and Roy A. Edelfelt, Pupil Personnel and Guidance Services (New York: McGraw-Hill Book Company, Inc., 1961), p. 178.

The counselor works as a member of a non-instructional professional team made up of the school psychologist, school social worker, school nurse, physician, and perhaps others such as hearing and speech specialists. The goal of the professional team is to discover and nurture the talents of all children from an early age and to assist each child in overcoming obstacles to his success in work and play.

In discussing the elementary counselor, Poling stressed:

The counselor at the elementary school attempts to make a contribution to the over-all educational program as he works with students, teachers, administrators and parents. His greatest strength comes from his education and experience and his concern for people. His greatest resource is the elementary teacher who is equally concerned about the child in her self-contained classroom. In working with the student as he gains self and environmental understanding, and in working with the teacher in developing an increasing awareness of individual concerns and methods alleviating these, his modus operandi should be guided by his belief in people and their willingness and desire to improve.¹

The elementary counselor does counseling with children.

The elementary school counselor does counseling with children in order to help the child understand himself and develop toward maturity. Counseling, usually given through the interview, consists of assisting an individual with a problem through face-to-face meetings and conversations. The

¹E. Gordon Poling, "Why Guidance in Elementary Schools," South Dakota Educational Journal, XLI (March, 1966); in Eugene D. Koplitz, editor, Guidance in the Elementary School: Theory, Research, and Practice (Dubuque, Iowa: Wm. C. Brown Company Publishers, 1968), p. 60.

primary emphasis in counseling students should be placed on developmental needs and decision points in the lives of the students rather than upon the remedial needs and the crisis points in their lives. The major goal of counseling is increased self-responsibility and an increased maturity in decision making on the students part.¹

In discussing the objectives of counseling, Hatch and Costar stated that:

First, it attempts to provide the counselee with information about himself and assist him to interpret the information correctly. Secondly, it helps the counselee to discover the elements and requirements of his environment and their relationship to his own personal growth and development. Thirdly, it assists him in adjusting to the environment by increasing his understanding of himself and by altering his environment, provided that such alteration seems feasible and desirable after all factors have been taken into consideration. Finally, a very important objective is one which sets as a goal increased independence on the part of the counselee resulting from a growing capacity of the child to resolve his own conflicts and concerns.²

The elementary school child may be referred to the counselor by his teacher, his parents or principal, or occasionally a child may independently seek help. The counselor must then observe and study the individual to

¹Wrenn, op. cit., p. 109

²Raymond N. Hatch and James W. Costar, Guidance Services in the Elementary School (Dubuque, Iowa: Wm. C. Brown and Company Publishers, 1961), p. 133.

discover the cause of the problem. He may sometimes administer an individual Intelligence Quotient test, observe the child in his group both in the classroom and on the playground, talk with his teacher, and visit the child or parents in their homes or invite them to visit the school. The amount of counseling services needed by pupils in the elementary school is probably less than that needed by students in secondary schools. Due to the fact that the elementary school youngster has fewer major choices to make, his problems are often of a more superficial nature and his parents are less willing to allow him to make independent decisions.¹

Because of the age of the children, the elementary school counselor may give more attention to working with parents and to general environment manipulation than would his counterpart in the secondary school.² When appropriate, the counselor may use multiple counseling techniques with small groups of children having common problems. The techniques and procedures of counseling must fit the child's level of development, and it is here that the uniqueness of elementary guidance can be seen. The use of toys, open-ended stories, and of role playing offers a different approach.³

¹Ibid., p. 132.

²Willey, op. cit., p. 27.

³Meeks, op. cit., p. 352.

The elementary school counselor must feel free to utilize play since this is the younger child's own means of expression and communication. The equipment selected for play should run in the direction of unstructured materials that invite a wide range of responses and expressive utilization on the part of the child.¹ In discussing play media Byrne felt that activity materials should be used in counseling sessions with elementary school children who find it difficult to deal with their behavior by means of verbal symbols, or who cannot sit still long enough to try to talk about their behavior. He said that:

The use of activity or "Play" materials facilitates their communication--lets them "say" with action some things they cannot say adequately with words. The use of such materials by the counselor is not for "therapy", but for communication facilitation.²

The Wrenn Report and the American School Counselor Association Report

Wrenn, in his report for the American Personnel and Guidance Association obtained a sampling of opinions from elementary school counselors as to what they thought their work would be in the years ahead. The counselors were asked this major question:

¹Richard C. Nelson, "Elementary School Counseling with Unstructured Play Media," Personnel and Guidance Journal, XXXV (September, 1966), 24.

²Richard Hill Byrne, The School Counselor (New York: Houghton Mifflin Company, 1963), p. 223.

Assuming that current concerns in counseling will continue to be emphasized--early identification and motivation of the talented on the one hand and the pre-delinquent on the other, vocational counseling of those in elementary school who may leave school early, etc.--do you see counseling in elementary schools during the next 20 years moving toward (1) the more clinical emphasis on psychological diagnosis and assistance for exceptional and atypical children or (2) the counselor serving as a coordinator of many counseling facilities in the school and community, with more time spent in helping parents and teachers than individual children?¹

In response to this question, 23 per cent of the counselors chose the first emphasis, 45 per cent the second, and 32 per cent a combination of the two.²

Wrenn indicated four functions of the elementary school counselor:

Pupil study: counseling including the use of planned group situations; consultation with teacher, parents, principal, and other specialists; follow-up studies and evaluative research. In small elementary schools the school counselor will also act as school psychologist and perhaps school social worker. In the larger schools or systems where these specialists are available the counselor uses them as referral resources or may engage in therapeutic counseling or in home visiting under the supervision of the school psychologist or school social worker.³

Wrenn continued:

When the genesis of the problem is in the school, or in some combination of school, parent and teacher,

¹C. Gilbert Wrenn, The Counselor in a Changing World (Washington: American Personnel and Guidance Association, 1962), pp. 120-121.

²Ibid, p. 121.

³Ibid., p. 150.

the counselor assumes the primary responsibility for the problem. When the problem is in the home and some change in home conditions or parental attitude is needed, the school social worker comes into the picture. When the problem is too complex as far as the child's psychological make-up is concerned, the school psychologist is the resource person.¹

Developmental Task Implication for Counseling

Since the achievement of the developmental tasks is so crucial to adequate functioning and adjustment, it is vitally important that maximum opportunities and assistance in developmental task mastery be provided at an early age. Zaccaria suggests that the developmental task concept has several implications for counseling.²

Byrne writes that counselors in the elementary school may serve the basic counseling function of the developmental check-up.³

According to Zaccaria:

A developmental task is a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and success with later tasks, while failure leads to unhappiness in the individual, disapproval by society and difficulty with later tasks. For example, the tasks of walking and talking are usually achieved

¹ Ibid.

² Joseph S. Zaccaria, "Developmental Tasks: Implications for the Goals of Guidance," Personnel and Guidance Journal, Vol. 44, No. 4 (December, 1965).

³ Richard H. Byrne, The School Counselor (New York: Houghton Mifflin Company, 1963).

by the age of two, and the child who fails to achieve these tasks about this age may be handicapped in mastering future tasks. Likewise, the major tasks of middle childhood include the acquisition of fundamental skills in reading, writing, and arithmetic. Accomplishing these tasks successfully paves the way for future development and learning, while failure to do so places the child at a serious disadvantage.¹

Zaccaria further emphasizes this point in this statement. The achievement of basic developmental tasks results in greater happiness and satisfaction for the individual. Success in mastering developmental tasks also leads to societal approval and a chain of other events which cumulatively enhance... more adequate personality integration, more adequate personal development, and the mastery of the general developmental tasks of each life stage.²

The developmental task concept provides the student and the counselor with relatively discrete criteria for evaluating the student's developmental progress in many areas. Thus, developmental tasks may be viewed as stepping stones whereby the student, assisted by the counselor, can achieve the broad goal of personal competence.

¹ Zaccaria, op. cit.

² Ibid.

CHAPTER III

PRESENTATION AND ANALYSIS OF DATA

The results of this study of the relationship between success in beginning reading and special training in areas of visual perception deficiencies, and the role of the elementary counselor in the role of the early identification of learning disabilities has been arranged and presented in this chapter in the following sections:

1. Presentation and analysis of test results in Word Knowledge, Word Discrimination, and Reading on the Metropolitan Achievement Tests for control group and experimental group.
2. Comparison of the control group and the experimental group in Word Knowledge, Word Discrimination, and Reading on the Metropolitan Achievement Test.
3. Comparison of test scores of pupils retained in 1969 group with scores they received in 1970.
4. Textual data to show need for special emphasis at the elementary level in the areas of visual perceptual deficits.

The purpose of the three tests in this study on the Metropolitan Achievement Test was to obtain dependable data

concerning the level of pupil achievement in the areas concerned with visual perception and success in beginning reading.

These test scores, like any test results, are simply data about pupils. Their utility lies in the extent to which they help the teacher, the guidance counselor and the school administration to a better understanding of individual pupils and the impact on them of particular instructional experiences. These test results provide no absolute solution to educational problems in the visual perception area, nor can they be expected to point to appropriate action on the part of teachers and counselors in a mechanical fashion. These results should be taken in conjunction with other information about each child.

Among the more important uses to be made of these test results by the teacher and counselor are the following:

1. To determine the achievement level of each child in each area to serve as a basis for planned instruction adapted to individual needs.
2. To compare present achievement with past achievement to determine growth.
3. To obtain data to be used as a basis for small group instruction.
4. As a first step in the diagnosis of an individual pupil's learning difficulties--so each child can achieve and have a good self concept.

5. To serve as a check on experimental programs so children may grow socially and emotionally as well as academically.

Table I shows the distribution of scores for the seven first grade classes in the control group in Word Knowledge. For ease of interpretation all scores were converted to percentages.

This was a 35 item test that measured the pupil's sight vocabulary, or word recognition ability. This ability was measured by means of pictured vocabulary items in which the child demonstrated his understanding of the stimulus words by correctly associating each word with a picture. Since deficiencies in this area of word knowledge greatly impede progress in learning to read, children who do poorly on this test need more experiences in word recognition exercises.

Thirty-four per cent of the children scored above the 89th percentile. Fifty-five per cent scored in the average range and 11 per cent scored below average.

Table II shows the distribution of scores for the ten classes in the experimental group. Three of the classes were taught by teachers who received special training at the Glen Haven In-Service Training Program on learning disabilities. These classes were smaller to facilitate individual needs.

TABLE I

DISTRIBUTION OF SCORES OF CONTROL GROUP 1969 IN WORD KNOWLEDGE
ON METROPOLITAN ACHIEVEMENT TEST

Per Cent	Special First Grades			Regular First Grade Classes							TOTAL
	1	2	3	4	5	6	7	8	9	10	
96-Above Superior	-	-	-	8	3	3	5	3	7	4	33
89-95 Above Av.	-	-	-	5	3	2	3	4	5	22	24
77-88 Average	-	-	-	6	6	9	5	3	8	6	43
60-76 Average	-	-	-	2	6	4	7	1	0	1	21
49-59 Average	-	-	-	2	6	2	2	4	0	4	21
29-39 Average	-	-	-	0	2	0	0	4	0	1	7
11-22 Below Av.	-	-	-	2	1	0	2	2	0	3	10
4-10 Below Av.	-	-	-	0	1	0	2	3	0	0	6
Below 4 Poor	-	-	-	0	0	0	0	0	1	0	1
	0	0	0	25	28	21	26	25	29	21	166

TABLE II

DISTRIBUTION OF SCORES OF THE EXPERIMENTAL GROUP 1970 IN WORD KNOWLEDGE
ON METROPOLITAN ACHIEVEMENT TEST

Per Cent	Special First Grades			Regular First Grade Classes							TOTAL
	1	2	3	4	5	6	7	8	9	10	
96-Above Superior	0	1	0	18	10	12	8	9	5	1	64
89-95 Above Av.	0	0	1	7	15	7	3	2	5	6	46
77-88 Average	0	1	3	2	1	2	4	1	5	1	20
60-76 Average	1	1	3	1	3	0	3	5	2	2	21
40-59 Average	2	3	2	0	1	0	1	4	2	0	15
23-39 Average	2	1	0	0	0	0	0	1	1	0	5
11-22 Below Av.	7	3	0	0	0	0	0	0	0	0	10
4-10 Below Av.	2	2	2	0	0	0	0	0	0	0	6
Below 4 Poor	1	0	1	0	0	0	0	0	0	0	2
	15	12	12	28	30	21	19	22	20	10	189

Included in the 189 total are 16 children who were retained in the control group. Only two children in the control group who were retained scored below the 40th percentile in word knowledge on the 1970 test.

Twenty-one children of the thirty-nine children in the classes diagnosed as those needing the most help in visual perception deficits scored below the 40th percentile in Word Knowledge.

This would be in agreement with literature presented in this study to support the need for individualized programs of instruction where these children who exhibit deficits are not expected to meet the pressures of grade level placement, but move rather to a new level of instruction after mastery of the one preceding--such as in a non-graded system.

It would appear that the child who has difficulty in word knowledge needs extra help and therefore should not be placed in a second grade situation where 58 per cent of the group scored in the 89th percentile or above. All that he gained in self concept in the special first grade situation would be destroyed when he tried to succeed in the developmental tasks in regular second grades.

This table also shows that the special emphasis on visual perception by regular classroom teachers helped children in the average range raise their scores by 23 per cent.

Table III shows a comparison of scores of the control group and the experimental group in Word Knowledge on the Metropolitan Achievement Test.

The per cent of children in the 96th percentile increased by 14 per cent and in the 89th to 95th percentile increased by 11 per cent.

The per cent of scores in the average range decreased by 23 per cent.

Apparently those in the average range were helped by the special emphasis on visual perception which the regular classroom teachers were able to give.

The scores below the 23rd percentile are approximately the same. However, the 16 children in the control group were retained and were able to raise their scores in 1970.

The eighteen children in the experimental group who scored below the 23rd percentile will remain with the teachers especially trained to help them overcome their deficit.

Table IV shows the distribution of scores of the control group before the emphasis on visual perception and specific learning disabilities in the Word Discrimination Test.

The word discrimination test was a 35-item test that measured the child's ability to select an orally presented word from a group of words of similar configuration. Success on this test depended on both auditory and visual discrimination abilities. The child had to be able to associate

TABLE III

COMPARISON OF SCORES OF CONTROL GROUP AND EXPERIMENTAL GROUP
IN WORD KNOWLEDGE ON METROPOLITAN ACHIEVEMENT TEST

Per Cent	Students in Control Group	1969 Per Cent	1970 Per Cent	Students in Experimental Group
96-Above	33	20	34	64
89-95	24	14	25	46
77-88	43	55	32	20
60-76	21			21
40-59	21			15
23-39	7	10	10	5
11-22	10			10
4-10	6			6
Below 4	1	1	1	2

TABLE IV

DISTRIBUTION OF SCORES ON CONTROL GROUP 1969 IN WORD DISCRIMINATION
ON METROPOLITAN ACHIEVEMENT TEST

Per cent	Special First Grades			Regular First Grade Classes							TOTAL
	1	2	3	4	5	6	7	8	9	10	
96-Above Superior	-	-	-	8	1	5	0	1	2	3	20
89-95 Above Av.	-	-	-	7	5	7	2	4	9	4	38
77-88 Average	-	-	-	4	2	4	3	2	5	0	20
60-76 Average	-	-	-	0	9	3	4	4	3	5	28
40-59 Average	-	-	-	1	3	2	6	6	1	4	23
23-39 Average	-	-	-	1	4	0	6	5	0	1	17
11-22 Below Av.	-	-	-	2	2	0	2	1	0	1	8
4-10 Below Av.	-	-	-	1	2	0	3	1	0	3	10
Below 4 Poor	-	-	-	1	0	0	0	1	0	0	2
	-	-	-	25	28	21	26	25	20	21	166

the sound of the word as spoken by the examiner with its printed form as well as be able to distinguish the printed word from other words similar to it with respect to beginning, middle or ending sounds. Each stimulus word was presented by the examiner in a context intended to very clearly show the child what the word was.

These discriminatory skills have been shown to be extremely important in beginning reading.

Deficiencies in this test point to the need for extra training in auditory discrimination and visual discrimination of letter and word symbols with sounds.

Thirty-five per cent of the scores were in the 89th percentile or above. Fifty-three per cent were included in the average range. Twelve per cent were in the below average range.

Sixteen of the eighteen in the below average group were retained and most were able to raise their scores in the 1970 test.

Table V shows the distribution of scores of the Experimental Group in Word Discrimination on the Metropolitan Achievement Test.

Distribution of scores on this test follows the same pattern as those on the Word Knowledge Test with percentages larger in the top range in ability and smaller in the average range. Those in the lower bracket remained approximately the same.

TABLE V

DISTRIBUTION OF SCORES OF EXPERIMENTAL GROUP 1970 IN WORD DISCRIMINATION
ON METROPOLITAN ACHIEVEMENT TEST

Per Cent	Special First Grades			Regular First Grade Classes							TOTAL
	1	2	3	4	5	6	7	8	9	10	
96-Above Superior	0	0	0	18	10	7	5	7	6	4	57
89-95 Above Av.	0	0	0	4	10	10	2	5	3	1	35
77-88 Average	0	3	0	3	4	2	1	1	3	0	17
60-76 Average	0	1	0	2	4	2	3	3	1	4	20
40-59 Average	1	4	4	0	2	0	7	4	4	1	27
23-39 Average	0	1	4	1	0	0	1	1	2	0	10
11-22 Below Av.	9	2	1	0	0	0	0	1	0	0	13
4-10 Below Av.	5	1	2	0	0	0	0	0	1	0	9
Below 4 Poor	0	0	1	0	0	0	0	0	0	0	1
	15	12	12	28	30	21	19	22	20	10	189

Twenty-one children in the special first grades scored below the 23rd percentile and two in the regular first grade classes had difficulty in word discrimination.

In the review of the literature Marion Monroe points out that the visual discrimination abilities vary greatly and that all children are not ready for formal reading but need structured games and exercises that will prepare them for specific visual skills needed in beginning reading.¹

Table V shows that there are children who need more help in this area and would profit by having extra individual help.

Of the sixteen retained in the control group, four showed need for more help. This help could be given in the regular classroom if the teacher is aware of it. The elementary counselor could be of service in helping identify these children with specific learning disabilities.

Table VI shows a comparison of scores of the control group and the experimental group in Word Discrimination on the Metropolitan Achievement Test.

Thirty-five per cent of the control group scored in the 89th percentile and above. In the experimental group forty-nine per cent were in this range, showing an increase of fourteen per cent.

¹ Marion Monroe, Growing Into Reading (Chicago: Scott, Foresman and Co., 1951).

TABLE VI

COMPARISON OF SCORES OF CONTROL GROUP AND EXPERIMENTAL GROUP
IN WORD DISCRIMINATION OF METROPOLITAN ACHIEVEMENT TEST

Per Cent	Students in Control Group	1969 Per Cent	1970 Per Cent	Students in Experimental Group
96-Above	20	12	30	57
89-95	38	23	19	35
77-88	20	53	39	17
60-76	28			20
40-59	23			27
23-39	17	11	11	10
11-22	8			13
4-10	10			9
Below 4	2	1	1	1

The average range in the experimental group showed a decrease in the per cent of children at this level and the lower ranges remained about the same.

Three per cent more of the experimental group scored in the lower ten per cent on Word Discrimination Test than on the Word Knowledge Test.

Table VII shows the distribution of scores of the control group in Reading on the Metropolitan Achievement Test. This test consisted of two parts. The first section which consisted of 13 items, measured the child's ability to comprehend sentences. He demonstrated this ability by choosing the sentence which correctly described the picture from three possible choices.

The second section of the Reading Test was a 33-item measure of ability to comprehend materials of paragraph length. The first items were written in "riddle" form which seem to be ideally suited for measuring ability to comprehend and reason at this level. Each reading selection was followed by several questions designed to measure important aspects of reading comprehension--obtaining specific information, forming visual concepts, making inferences, and using total reading skills.

Sixteen per cent of the control group scored in the 96th percentile. Twenty-three per cent scored in the 89th to 95th percentile. Approximately fifty per cent were average and twelve per cent scored below average.

TABLE VII

DISTRIBUTION OF SCORES OF CONTROL GROUP 1969 IN READING
ON METROPOLITAN ACHIEVEMENT TEST

Per Cent	Special First Grades			Regular First Grade Classes							TOTAL
	1	2	3	4	5	6	7	8	9	10	
96-Above Superior	-	-	-	6	5	4	2	2	5	3	27
89-95 Above Av.	-	-	-	11	3	8	4	3	7	3	39
77-88 Average	-	-	-	3	3	4	2	3	4	2	21
60-76 Average	-	-	-	0	2	3	7	2	2	7	23
40-59 Average	-	-	-	2	4	2	5	2	2	2	19
23-39 Average	-	-	-	0	8	0	1	7	0	2	18
11-22 Below Av.	-	-	-	1	2	0	4	3	0	2	12
4-10 Below Av.	-	-	-	2	1	0	1	2	0	0	6
Below 4 Poor	-	-	-	0	0	0	0	1	0	0	1
	-	-	-	25	28	21	26	25	20	21	166

Of the nineteen children in the control group scoring below the 40th percentile, sixteen were retained and all but four raised their scores the next year.

Table VIII shows the distribution of scores in Reading on the Metropolitan Achievement Test for the experimental group.

In the 96th percentile range were forty-four per cent of the children in the first grade classes. This was the greatest gain--a gain of twenty-eight per cent. In the 89th to 95th percentile were sixteen per cent of the scores.

The average category had twenty-eight per cent while the lower end of the continuum had twelve per cent. This table also shows the emphasis on visual perceptual skills resulting in higher reading scores.

Only twenty-eight per cent of the total group scored average on this test. Twenty per cent of the pupils in the average range had been repeaters while one per cent of those repeating showed no substantial gain from repeating.

Table IX shows the comparison of scores of the control group and the experimental group in Reading on the Metropolitan Achievement Test.

Table IX shows forty-four per cent of the children in the 96th percentile for the experimental and sixteen per cent in the control group. This is a gain of twenty-eight per cent--the greatest gain on any of the tests given.

TABLE VIII

DISTRIBUTION OF SCORES OF EXPERIMENTAL GROUP 1970 IN READING
ON METROPOLITAN ACHIEVEMENT TEST

Per Cent	Special First Grades			Regular First Grade Classes							TOTAL
	1	2	3	4	5	6	7	8	9	10	
96-Above Superior	0	0	0	24	17	15	8	7	5	7	83
89-95 Above Av.	0	1	0	2	9	3	11	2	3	0	31
77-88 Average	0	0	0	1	1	3	0	3	4	2	14
60-76 Average	0	0	0	0	2	0	0	1	4	0	7
40-59 Average	0	0	0	1	1	0	0	4	1	1	8
23-39 Average	4	3	6	0	0	0	0	2	2	0	17
11-22 Below Av.	3	4	2	0	0	0	0	1	1	0	11
4-10 Below Av.	8	3	3	0	0	0	0	1	0	0	15
Below 4 Poor	0	1	1	0	0	0	0	1	0	0	3
	15	12	12	28	30	21	19	22	20	10	189

TABLE IX

COMPARISON OF SCORES OF CONTROL GROUP AND EXPERIMENTAL GROUP
IN READING ON METROPOLITAN ACHIEVEMENT TEST

Per Cent	Students in Control Group	1969 Per Cent	1970 Per Cent	Students in Experimental Group
96-Above	27	16	44	83
89-95	39	23	16	31
77-88	21	49	28	14
60-76	23			7
40-59	19			8
23-39	18	11	11	17
11-22	12			11
4-10	6			15
Below 4	1	1	1	3

In the 89th to 95th percentile were sixteen per cent of the total group.

In the average range there were twenty-one per cent less pupils. These were pupils who were challenged in reading and were able to achieve and comprehend more of what they read and thus scored higher.

The percentage of pupils in the below average range stayed exactly the same--twelve per cent.

Twenty-five of the pupils who scored in the 22nd percentile, or below were in our special first grade classes. This perhaps shows that they were not ready for regular first grade class work. These pupils spent more time on beginning perceptual skills and were not ready for the reading comprehension test.

In the Gray study, quoted in this paper, William S. Gray emphasized that readiness was an all-important factor in reading success. With additional help from the teachers and emphasis on an individualized instructional procedure these pupils should achieve and thus maintain a good self-concept. It might take some of them a longer period of time as Gray's study also emphasized the uniqueness of each individual and the necessity for each to proceed and build on each skill as he is ready.

RETENTION - 1969 CONTROL GROUP

Included in the Experimental Group were 16 children

who were retained in the 1969 Control Group.

Table X shows percentages of scores of these children for both years.

In addition one child was transferred to Special Education. No scores were available for this child the second year.

TABLE X

COMPARISON OF SCORES OF CHILDREN RETAINED IN 1969 CONTROL GROUP
WITH THEIR SCORES IN 1970

Pupil	Word Knowledge		Word Discrimination		Reading	
	1969 Per Cent	1970 Per Cent	1969 Per Cent	1970 Per Cent	1969 Per Cent	1970 Per Cent
1	25	95	20	98	5	98
2	10	85	5	75	10	75
3	50	95	30	90	40	98
4	45	90	27	98	30	90
5	10	75	6	70	15	65
6	10	95	10	35	20	90
7	10	90	25	40	25	95
8	20	98	5	85	15	98
9	18	83	4	53	30	80
10	7	20	4	55	12	15
11	8	85	3	44	30	90
12	2	39	4	40	2	35
13	15	60	10	55	15	30
14	15	86	6	55	10	80
15	20	55	20	65	15	45

CHAPTER IV

SUMMARY AND CONCLUSIONS

It was the purpose of this study to determine the relationship between success in beginning reading and special training in areas of visual perception deficiencies and to determine the role of the elementary counselor in the early identification of learning disabilities.

To evaluate the effectiveness of the special training in areas of visual perception, scores on the Metropolitan Achievement Test in Word Knowledge, Word Discrimination, and Reading were compiled for the control group where no extra help was given and for an experimental group where much emphasis was placed on visual perception. This comparison was on the basis of per cent of pupils scoring in the above average, average, and lower range of the Metropolitan Test.

The data were compiled and presented by the use of tables to show various comparisons of the control group and the experimental group. From these comparisons conclusions were drawn concerning the effectiveness of the special emphasis on visual perception skills and success in beginning reading.

It can generally be concluded that there was great gain made as sixty per cent of the boys and girls scored in

the above average range on the reading comprehension test. With this acquired skill these children are ready to be challenged in all other second grade academic experiences which deal with visual perception skills. Their self-concept should be good in the area of academic success. Another twenty-eight per cent should feel quite secure in the average group. The lower twelve per cent can be helped by teachers who recognize individual differences and teach and reach accordingly.

IMPLICATIONS FOR ELEMENTARY COUNSELORS

The needs of children which have particular relevance for the elementary school counselor include: competence, independence, approval and acceptance. Of these, the need for acceptance is of primary importance. Acceptance includes feeling important and wanted by both the peer and adult society.

If the counseling service in the elementary school is to meet the needs of children and help them become competent and participating members of society it becomes tremendously important to understand what these needs are. If children have difficulty in the visual discrimination process or any of the other important skills which will hinder self acceptance, early diagnosis and help should be given.

This study also shows that each child is a unique individual in his readiness rate. Although all children go

through approximately the same stages of development, they do not go through them at the same specific age. A child may be the same chronological age and have the same height and weight as his peers but his readiness rate for learning tasks may deviate significantly from his peers. The negative consequences of forcing a task upon a child before he is ready for it may endure throughout his school years. When children are confronted with tasks beyond their level of maturity they tend to become discouraged and lose interest in the task at hand. In addition they are likely to develop negative attitudes toward school, toward teachers, and toward themselves. These children could become discipline problems and early school drop-outs.

Some children, however, are able to master some tasks much earlier than their age mates. Children with advanced maturity may also lose interest and develop negative attitudes if the mastery of significant developmental tasks is postponed too long. Some assessment of the child's developmental readiness--intellectual, emotional, and physical--is vital to the process of setting goals for learning, and to the counselor's function of aiding significant others in understanding the child.

A possible role of the elementary counselor could be to help identify strengths and weaknesses and help work toward an individualized program of instruction in meeting the needs of all children in all classrooms.

There could and should be a suitable learning situation for every child, no matter what his abilities are, and the elementary counselor should work toward that goal.¹

The writer read many books on self concept, non-graded programs of instruction, individualized instruction, and promotion versus retention.

A book which greatly impressed the writer was, "Is Your Child in the Wrong Grade?" written by Louise Bates Ames.

Dr. Ames says:

Many sincere people genuinely believe that it will harm a child emotionally if he is required to repeat. Unfortunately at this time no clear research results are available which prove or disprove the theory that a child suffers psychic damage by being held back.

Not every child who repeats will then perform his school work effectively. This is to be expected. Repeating a grade is no magic formula which will cure everything. But if a child is required to repeat because his behavior is not up to the work of his grade, if he is only one grade ahead of the grade he belongs in and there are no complicating factors, experience shows that almost without exception the child's performance at school is conspicuously improved.

Repeating a grade will not give the child the intelligence he may seriously lack. It will not of itself, provide emotional stability in the emotionally unstable child. It can lighten the load but still cannot guarantee success for the child who belongs in a special classroom.

But if a child's poor response to school in a grade to which age assigned him is caused chiefly by immaturity and unreadiness for that grade, repeating will in most cases work wonders.

She further states that if a child is to be retained, it should be done as soon as possible.¹

¹ Louise Bates Ames, "Is Your Child In The Wrong Grade?" Gessell Institute of Child Development (New York: Harper and Row, Publishers), pp. 29-30.

BIBLIOGRAPHY

BIBLIOGRAPHY

A. VISUAL PERCEPTION REFERENCES

- Barnette, Casper C. Learning Through Seeing. Dubuque, Iowa: Wm. C. Brown Company, 1961.
- Bartley, S. Howard. Principles of Perception. New York: Harper and Row, 1958.
- Bond, Guy L. and Miles A. Tinker. Reading Difficulties: Their Diagnosis and Correction. New York: Appleton-Century-Crofts, Inc., 1967.
- Coleman, James C. "Perceptual Retardation in Reading Disability Cases," Journal of Educational Psychology, XXXIV (1953).
- Eberl, Margaret. "Why Johnny Can't Read," The Optometric Extension Program News, Vol. 20, No. 10 (June, 1956).
- Edgington, Ruth and Lilliam Blackman. Helping Children with Reading Disability. University of Arkansas Medical Center, 1962.
- Getman, G. N. "How to Develop Your Child's Intelligence." Luverne, Minnesota, 1957.
- Getman, G. N. and N. C. Kephart. The Perceptual Development of Retarded Children, Luverne, Minnesota. Manual. Lafayette, Indiana: Purdue University, 1956.
- Grau, Albert F. J. S. "The Emotional World of the Non-Achiever," The Journal of the Optometric Association, XXVIII, No. 9 (April, 1957).
- Gray, William S. Reading in Action, Vol. 2. New York: Scholastic Magazine, 1959.
- Harris, A. J. How to Increase Reading Ability. New York: Longmans, Green, 1956.
- Harrison, Edna L. "The Perceptually Handicapped Child," The Grade Teacher, LXXXVI (April, 1969), 74-75.

Kagerer, Rudolph L. "The Relationship of Visual Perception in Early Grades to Reading Level in Grade Four," Winter Haven Report, 1960.

Kephart, Newell C. The Slow Learner in the Classroom. Chicago: Charles E. Merrill Company, 1960.

_____. "The Glen Haven Training Program," Fort Collins, Colorado, 1969.

Lyons, Venard C. and Emily B. Lyons. "Collected Works of Lyons and Lyons," American Optometric Association, St. Louis, Missouri.

McGinnis, Dorothy J. "Effective Reading," New York: The Dryden Press, Inc., 1957.

Metropolitan Achievement Test Battery--Readiness and First Grade.

Monroe, Marion. Growing Into Reading. Chicago: Scott, Foresman and Company, 1951.

Park, G. E. and C. Burri. "Eye Maturation and Reading Difficulties," Journal of Educational Psychology, XXXIV (1953), 538-539.

Radler, D. H. "How Johnny Can Read," P. R. F. Horizon (pamphlet), Vol. 3, No. 1, Purdue Research Foundation, September, 1956.

Spache, George D. Good Reading for Poor Readers. Champaign, Illinois: Garrard Press, 1962.

_____. Toward Better Reading. Champaign, Illinois: Garrard Press, 1962.

B. ELEMENTARY GUIDANCE REFERENCES

Ames, Louise Bates. Is Your Child in the Wrong Grade? Gessell Institute of Child Development, Harper and Row, Publishers.

Byrne, Richard Hill. The School Counselor. New York: Houghton Mifflin Company, 1963.

- Eckerson, Louise Onwake and Hyrum Smith. "Elementary School Guidance: The Consultant," School Life, XLIV (July, 1962) in Don C. Dinkmeyer, Guidance and Counseling in the Elementary School. New York: Holt, Rinehart and Winston, Inc., 1968.
- Garry, Ralph. Guidance Techniques for Elementary Teachers. Columbus, Ohio: Charles E. Merrill Books, Inc., 1966.
- Grams, Armin. Fascilitating Learning and Individual Development: "Toward a Theory for Elementary Guidance." St. Paul: Minnesota Department of Education, 1966.
- Hatch, Raymond N. and James W. Costar. Guidance Services in the Elementary School. Dubuque, Iowa: Wm. C. Brown and Company, Publishers, 1961.
- Johnson, Walter F., Buford Stefflre, and Roy A. Edelfet. Pupil Personnel and Guidance Services. New York: McGraw Hill Book Company, Inc., 1961.
- Meeks, Anna. "Elementary School Counseling," School Counselor, X (1962), 108-111; in John Adams, editor, Counseling and Guidance. New York: The Macmillan Company, 1955.
- Nelson, Richard C. "Elementary School Counseling with Instructional Play Media," Personnel and Guidance Journal, XXXV (September, 1966).
- Poling, E. Gordon. "Why Guidance in Elementary Schools," South Dakota Educational Journal, XLI (March, 1966).
- Smith, Margaret Ruth. Guidance-Personnel Work: Future Tense. New York: Teachers College Press, Columbia University, 1966.
- Traxler, Arthur E. Techniques of Guidance. New York: Harper and Row, 1957.
- Willey, Roy DeVerl. Guidance in Elementary Education. New York: Harper and Brothers, 1960.
- Zaccaria, Joseph S. "Developmental Tasks: Implications for the Goals of Guidance," Personnel and Guidance Journal, Vol. 44, No. 4 (December, 1965).